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IN THE  
**Supreme Court of the United States**

MICHAEL RODAK, JR., CLERK

OCTOBER TERM, 1977

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No. 77-753

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INTERNATIONAL BROTHERHOOD OF TEAMSTERS,  
CHAUFFEURS, WAREHOUSEMEN AND  
HELPERS OF AMERICA,  
v. *Petitioner,*

JOHN DANIEL,  
*Respondent.*

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No. 77-754

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LOCAL 705, INTERNATIONAL BROTHERHOOD OF TEAMSTERS,  
CHAUFFEURS, WAREHOUSEMEN AND HELPERS OF AMERICA,  
AND LOUIS F. PEICK,  
v. *Petitioners,*

JOHN DANIEL,  
*Respondent.*

**On Writs of Certiorari to the United States  
Court of Appeals for the Seventh Circuit**

**MOTION FOR LEAVE TO FILE BRIEF AS  
AMICUS CURIAE AND BRIEF FOR THE  
AMERICAN ACADEMY OF ACTUARIES  
AS AMICUS CURIAE**

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May 19, 1978

# INDEX

	Page
Motion for leave to file brief as <i>amicus curiae</i> .....	iv
Brief as <i>Amicus Curiae</i> .....	1
Interest of the <i>amicus curiae</i> .....	2
Introduction and Summary .....	2
Argument .....	3
I. "Actuarial probability" of the receipt of plan benefits .....	3
A. There is no particular correspondence between the data employed to determine pension cost or contribution levels and the data needed to inform participants about "actuarial probabilities" .....	5
B. Even if wholly accurate data were available concerning the anticipated experience of plan participants as a group, that data would not justify quantitative predictions to individual employees .....	11
II. The "sale" of pension plan interests to covered employees .....	14
A. Defined benefit plans .....	15
B. Multi-employer plans .....	19
Conclusion .....	21

## CITATIONS

## Cases:

## Page

<i>City of Los Angeles v. Mankart</i> , No. 76-1810 (decided April 25, 1978) .....	<i>passim</i>
<i>Daniel v. International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America</i> , 410 F. Supp. 541 (N.D. Ill. 1976) .....	3
<i>Daniel v. International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers</i> , 561 F.2d 1223 (7th Cir. 1977) .....	3
<i>Henderson Bridge Co. v. McGrath</i> , 134 U.S. 260 (1890) .....	18
<i>Red Wing Shoe Co. v. Shepherd Safety Shoe Corp.</i> , 164 F.2d 415 (7th Cir. 1947) .....	18
<i>United States v. Swift &amp; Co.</i> , 270 U.S. 124 (1926) ..	18

## Statutes and Regulations:

Employee Retirement Income Security Act of 1974, Pub. L. 93-406, 88 Stat. 829, 29 U.S.C. § 1001 <i>et seq.</i> :	
§ 102(a) (1) .....	22
§ 104(b) (1) .....	22
§ 202 .....	10
§ 302(b) (2) (B) (iv) .....	10
§ 302(b) (3) (B) (ii) .....	10
§ 302(c) (3) .....	6
Securities Act of 1933, 48 Stat. 74, 15 U.S.C. § 77a <i>et seq.</i> .....	2
Securities Exchange Act of 1934, 48 Stat. 881, 15 U.S.C. § 78a <i>et seq.</i> .....	2
U.C.C. § 1-201 (14) .....	18
§ 1-201 (32) .....	18
§ 2-204 (3) .....	18
§ 2-305 .....	18
§ 8-301 .....	18
29 C.F.R. § 2520.102-3(j) (1) and (n) (1977) .....	22
Treas. Reg. § 1.72-9, 26 C.F.R. § 1.72-9 (1977) .....	14

## CITATIONS—Continued

## Treatises and Articles:

## Page

1 A. CORBIN, CONTRACTS § 97 (1963) .....	18
Fellers & Jackson, <i>Non-Insured Pensioner Mortality, The UP-1984 Table</i> , 25 PROCEEDINGS, CONFERENCE OF ACTUARIES IN PUBLIC PRACTICE (1976) .....	15, 16, 17
MCGILL, FUNDAMENTALS OF PRIVATE PENSIONS, (3d ed. 1975) .....	5, 10
Pension Plan Recommendations and Interpretations, in American Academy of Actuaries, By-laws, Guides to Professional Conduct and Standards of Practice (January 1, 1978) .....	5, 6
WALLIS & ROBERTS, THE NATURE OF STATISTICS (1962) .....	11
1 S. WILLISTON, CONTRACTS § 41 (1957) .....	18
1 S. WILLISTON, SALES §§ 9-1 & 9-2 (4th ed. A. Squillante & J. Fonseca 1973) .....	18

## Miscellaneous:

Interim Report of Activities of Private Welfare and Pension Plan Study, S. Rep. No. 92-634, 92d Cong., 2d Sess. (1972) .....	3
U.S. Dept. of Commerce, Bureau of the Census, Statistical Abstract of the United States 1977 (98th ed.) .....	12, 13

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**MOTION OF THE AMERICAN ACADEMY OF  
ACTUARIES FOR LEAVE TO FILE BRIEF  
AS AMICUS CURIAE**

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The American Academy of Actuaries was formed in 1965 as a national accrediting organization by four national actuarial organizations—the Casualty Actuarial Society, the Conference of Actuaries in Public Practice, the



Fraternal Actuarial Association, and the Society of Actuaries (the "constituent organizations"). There are currently over 7,000 members of the Academy and the four constituent organizations. Members of the Academy include actuaries in all areas of specialization and practice within the profession. Membership in the Academy is open only to those who have satisfied both education and experience requirements. Over 90 percent of the actuaries in the United States who have met the entrance requirements of the Academy have become members.

One major area of specialization is the design and administration of employee retirement plans. Virtually every member of the Academy engaged in this branch of actuarial practice has qualified as an "enrolled actuary," pursuant to Section 3042 of the Employee Retirement Income Security Act of 1974 ("ERISA"), and as such is authorized to make the annual certification required by Section 103(a)(4)(A) of that Act.

Actuaries perform several functions in connection with the establishment and administration of pension plans. They render advice to plan sponsors concerning the design of their plans, which often includes estimates concerning the impact of alternate features upon the cost to employer sponsors or the level of plan benefits that can be provided by a specific contribution rate. A significant and continuing function involves advice as to the level of the contributions that should be made in order to provide prudently for the payment of the plan benefits. This involves taking into account many factors, including the age and sex distribution of eligible and potentially eligible employees, turnover rates, mortality rates, inflation trends, salary increase rates, and anticipated investment return. Actuaries also participate with the plan sponsors and with other expert consultants, including lawyers and accountants, in the preparation of literature intended to keep covered employees adequately informed about the terms and status of the plans.

The Academy, in the October 1977 term of this Court, filed a brief *amicus curiae* in *City of Los Angeles v. Manhart*, No. 76-1810 (decided April 25, 1978). As was the case in that litigation, there would be no reason for us to support either affirmance or reversal of the judgment below, if the criterion were solely the economic self-interest of the members of the actuarial profession. However, the decisions of the lower courts, as we show in the accompanying brief, appear to have been materially but erroneously influenced by what those courts perceived to be the possibility and desirability of disclosing to participants and prospective participants what was characterized as the "actuarial probability" that benefits would be received. In addition, we are concerned that those decisions, if allowed to stand or at least if not clarified, could impose obligations upon plan sponsors and actuaries that would impede rather than advance the objective of providing plan participants with meaningful information about the terms and status of their plans. We believe we can provide the Court with information that may not be adequately covered by the parties or other *amici* relating to what actuaries do and to the feasibility of using the results of their work in providing covered employees with appropriate information about their plans.

Accordingly, the American Academy of Actuaries requests that this Court grant leave to the Academy to file the accompanying brief as *amicus curiae*.

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BRIEF FOR THE AMERICAN ACADEMY OF  
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## INTEREST OF THE AMICUS CURIAE

The interest of the *amicus curiae* is set forth in the attached Motion for Leave to File Brief as Amicus Curiae.

### INTRODUCTION AND SUMMARY

We do not believe that we can add usefully to the arguments by the parties and the other *amici* relating to the first of the two issues presented by petitioners—whether the expectation of, or in some cases the contractual right to, plan benefits acquired by covered employees when their employer establishes a pension plan, of the kind established by Local 705 of the International Brotherhood of Teamsters and the participating employers that employ persons represented by that union, constitutes a “security” for purposes of the Securities Act of 1933 and the Securities Exchange Act of 1934. The opinions of the District Court and of the Court of Appeals, however, contain strong indications that their determination of this issue was significantly influenced by their belief that the public interest would be advanced if the antifraud provisions of the 1933 and 1934 Acts applied to the acquisition by employees of interests in pension plans. In Part I of this brief we offer our views about the availability, accuracy, and utility of the kind of information that the courts below believed would be appropriate or legally required if the antifraud provisions did apply.

If this Court should hold that interests in such pension plans do fall within the definitions of Section 2(1) of the 1933 Act and of Section 3(a)(10) of the 1934 Act, the second question is whether the interests are “sold” to the covered employees. The manner in which annual contributions are determined and their relationship to the promised or anticipated plan benefits may be relevant to this question, and this is the subject of Part II.

## ARGUMENT

### I. “ACTUARIAL PROBABILITY” OF THE RECEIPT OF PLAN BENEFITS

Portions of the opinions of both the District Court and the Court of Appeals suggest that their decisions were shaped in part by what we regard as an inadequate understanding of the nature of the findings and services that the actuarial profession provides to retirement plans. The District Court appears to have been singularly affected by a 1972 study which it interpreted as showing that “as few as eight percent of those participants in pension plans with vesting requirements of eleven years or more will ever receive any pension benefits.”<sup>1</sup> The court went on to express the view, concerning union votes on wage packages, that “[t]he court is persuaded that few members would ever vote for an allocation to a pension increase in lieu of a greater salary increase if they knew at the time of the vote that they would have an eight percent or smaller chance of ever realizing any benefit from the increased pension allocation.” 410 F. Supp. at 553. The District Court’s conclusion was apparently rooted in allegations in the complaint that defendants omitted to state that the plan’s “actuarial basis was arbitrary” and that they omitted to state the “pertinent information needed to disclose the actuarial basis upon which the funds were grounded” and “the actuarial likelihood that a union member will not receive any pension benefits at all.”<sup>2</sup>

<sup>1</sup> *Daniel v. International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America*, 410 F. Supp. 541, 551 (N.D. Ill. 1976), citing Interim Report of Activities of Private Welfare and Pension Plan Study, S. Rep. No. 92-634, 92d Cong., 2d Sess., at 15, 115-53 (particularly, it appears, 130-31) (1972). With respect to the District Court’s interpretation, see note 12 *infra*.

<sup>2</sup> *Daniel v. International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers of America*, 561 F.2d 1223, 1227 (7th Cir. 1977).



The Court of Appeals stated that the effect of the District Court's decision is to "require defendants, when offering a defined pension plan to a member, to disclose the actuarial probability \* \* \* that a member actually will receive pension benefits, and factors such as risk of loss, breaks in service, death before retirement age, and plan termination, that can cause this member to be deprived of his benefits \* \* \*" 561 F.2d at 1229. The court appeared to agree, pointing out that there should be no undue burden caused by such disclosure "because all of the material information will be readily available to the plan trustees since their actuaries needed all of the information in order to set up the plan in the first place." *Id.* at 1250.

The foregoing statements reflect an imperfect appreciation both of the nature and extent of the information available to actuaries and of whether it is feasible for an actuary or plan sponsor to use the information that is available as the basis for providing employees with meaningful and reliable predictions of the sort suggested by the courts below. As we observed in another context, the work of actuaries requires an understanding of a branch of mathematics—the theory of probabilities—without which anyone treating with averages can fall rather easily into serious error,<sup>3</sup> and this, for reasons we shall try to explain, is what has happened to the courts below.

First, some of the many factors that can affect the determination of what contributions are needed to meet the promised plan benefits are far more significant than others. In the interest of simplicity, actuaries often ignore those factors whose aggregate impact is of an order of magnitude that is small in relation to the margin of error inherent in the more significant factors that are

<sup>3</sup> Brief for the Academy, *amicus curiae* in *City of Los Angeles v. Manhart*, No. 76-1810 (decided April 25, 1978).

taken into account. Thus some of the information that the court below believed will be "readily available" in fact will not be. Second, conclusions that are accurate when made with respect to large numbers of persons are often either incorrect or else not meaningful and so not useful when applied to individual members of the group or to small subsets of individuals. We discuss each of these points in turn.

**A. There Is No Particular Correspondence Between the Data Employed To Determine Pension Cost or Contribution Levels and the Data Needed To Inform Participants About "Actuarial Probabilities"**

It is true, as the courts below evidently understood, that some of the factors that affect the determination of the cost of a single employer or a multi-employer defined benefit pension plan would be relevant also to the making of predictions concerning the likelihood that employees will receive plan benefits at retirement or earlier termination of employment. Mortality and disability experience and the rate of employee withdrawals (which may vary with age, sex, rate of compensation, length of service, and other factors) are among the most important.<sup>4</sup> Other factors, such as projected increases in salary levels and anticipated return on investments held on behalf of the plan, significantly affect the determination of annual contribution rates but are only remotely related to the question of whether pension benefits are likely to be paid.<sup>5</sup> The extent to which all of the above factors are actually taken into account, however, varies greatly from plan to

<sup>4</sup> MCGILL, *FUNDAMENTALS OF PRIVATE PENSIONS* 312-20 (3d ed. 1975); see also *Pension Plan Recommendations and Interpretations*, § 6.2, in *American Academy of Actuaries, Bylaws, Guides to Professional Conduct and Standards of Practice* 90 (January 1, 1978).

<sup>5</sup> MCGILL, *supra* note 4, at 312.



plan, and, except for very large plans, it is often uneconomical and unnecessary to use all of them.<sup>6</sup>

Because the practicing actuary recognizes the rather limited effect on plan costs of certain factors such as variations in rates of withdrawal for reasons other than age, practical approximations are commonly used. It is often the case, for example, for the probability of withdrawal from a plan without vested rights in any given year, along with the probability of death or disability, to be assumed to depend solely upon the age of the employee, and not upon sex, length of service, rate of compensation, or any other factor. In choosing this approximate method, the actuary does not assert that the various other factors do not affect the rate of withdrawal. An actuary knows that the use of rates of withdrawal or retirement which depend not only on attained age but also on length of service will require the determination of actuarial present values and plan costs on the basis of 35 or 40 service tables (one for each entry age into the plan) where otherwise one would do.<sup>7</sup> Such extreme complexity is not warranted by the rather modest refinement in the estimated cost. What is required of the actuary is that the assumptions that are used must in the aggregate be reasonable.<sup>8</sup>

<sup>6</sup> See Pension Plan Recommendations and Interpretations, § 9.1, *supra* note 4.

<sup>7</sup> For example, consider a plan with 40 entry ages from 25-64 inclusive with a retirement age of 65. If factors are based on age only, then service tables for this plan would have 40 entries, one for each age. However, if factors are based on both age and length of service, then 40 factors will be required at age 25 alone, 39 factors will be required at age 26, and so forth, producing a total of 820 factors ( $40 + 39 + \dots + 1 = 820$ ). Thus, this seemingly modest refinement actually increases the number of factors required more than twenty-fold. Computers can of course assist in these refinements, but not without added cost.

<sup>8</sup> This concept is recognized, for example, in the actuarial review requirements of the Employee Retirement Income Security Act of 1974 ("ERISA"), § 302(c)(3).

In the case of a plan covering relatively few employees, for example, an actuary might well assume that there will be no employee turnover whatever, because this results in a conservative cost estimate.<sup>9</sup> An advantage of making conservative assumptions is that this produces a margin that can offset unanticipated bad experience in the future. To take another example, in valuing a pension plan which provides vesting at ten years of service, an actuary might employ a three percent probability of withdrawal without vested rights for every employee who is age 40 in the group, thereby assigning the same probability of withdrawal for employees of that age who have one year of service as for employees who have seven years of service. It would plainly be misleading, if a similar grouping were made in connection with an estimate of the likelihood of receiving plan benefits and the recently hired employees were informed that they have the same chance of receiving pension benefits as the employees who need to work only three more years for their right to receive benefits to vest. Moreover, the zero and the three percent withdrawal assumptions are not the only ones that can be actuarially sound. An actuary may quite properly choose from a range of acceptable assumptions, and there is no reason whatever to conclude that the ones that happen to be satisfactory for use in determining pension cost are also adequate for use in making an estimate of the likelihood of a single individual receiving benefits, if for some reason it is useful to make such an estimate.<sup>10</sup>

<sup>9</sup> Typically, in a plan covering only a few employees, most of the cost is associated with one or two key employees who are often the owners or managers of the business. Thus, an assumption of some employee turnover might well understate costs in the plan if, as is usually the case, all key employees continue.

<sup>10</sup> See page 16 *infra* for an illustration, in quantitative terms, of how wide a difference there can be between two equally acceptable assumptions, with only a modest effect upon the amount of the contribution to be made.

If employees must be given quantitative estimates of their likelihood of receiving benefits, persons of different ages or lengths of service or occupations thus cannot be grouped together even where this may be appropriate where costs for the plan as a whole are being determined.<sup>11</sup> Moreover, the computations would have to be made anew each year if a "sale" is deemed to take place each time a contribution to the plan is made. The actuarial work required would involve a considerable addition to that now being done, contrary to the belief of the court below.<sup>12</sup>

<sup>11</sup> Although it is unlawful for an employer to require higher contributions for female than for male employees, *City of Los Angeles v. Manhart*, *supra* note 3, and while actuaries might in many cases ignore sex differences when determining pension costs because other factors are more significant, if employees are to be given information concerning the likelihood of their receiving benefits, particularly with the degree of accuracy customarily required by the securities laws, additional computations would have to be made so as to include factors based upon sex.

<sup>12</sup> There is still another respect in which even a perfectly correct statement about past experience concerning the percentage of persons who have received pension benefits can nevertheless be highly misleading if used uncritically to predict what should be anticipated by particular persons. The point is most easily made by the use of an oversimplified hypothetical example. Consider a plan with 20 employees, 10 of whom remain until retirement and 10 who leave after less than a year (perhaps reflecting seasonal employment or high turnover in jobs that require less skill) and who are continuously replaced by a different group of 10 employees who also leave in less than a year. After one year the observed experience is that one out of two employees terminate without retirement benefits. After two years, it is two out of three; after four years, four out of five; and after nine years, nine out of ten. It is evident that the percentage of participants who retire entitled to benefits becomes extremely low if the experience of many years is accumulated and that this ever decreasing percentage cannot sensibly be equated with the probability that one of the original 10 employees will receive benefits upon retirement. Moreover, the percentage applies only to this one plan; of course those who leave the plan may join other plans. The "eight percent or smaller chance" referred to by the District Court (page 3 *supra*) is an asserted probability that is subject to the same infirmities as the 10 or even lower percent probability of this hypothetical example.

Of equal significance, the assumptions that an actuary finds it necessary to use in determining pension costs will frequently not be sufficiently reliable to use as a basis for informing employees about the likelihood of the vesting of their plan benefits. This is because a good many of the assumptions cannot be based on the facts of past experience but rather must be based on judgment. Consider, for example, a new defined benefit plan being installed by a group of employers. The actuary employed to develop initial costs will probably have no satisfactory data with which to develop the past experience for such factors as the number of hours an employee is likely to work in the course of a year,<sup>13</sup> the mortality to be expected of the group, the investment return that can be expected by this plan, or the average age of retirement under the new plan. In these circumstances the actuary must rely on judgment and experience with programs in other comparable organizations. There is no alternative, since a determination must be made of what contribution should be made for that year. It would be foolhardy, however, to use these assumptions as a basis for offering advice to the effect that the employees as a group have, say, an X% likelihood of reaching retirement age and receiving benefits. Under an on-going plan with considerable past experience available to the actuary, some predictions can be made concerning the future experience of large groups of employees, but the past experience has diminished predictive value with respect to groups of new entrants who have never been exposed to the prior conditions involved in the member companies.

The actuarial assumptions which most directly affect the likelihood of surviving to retirement age and re-

<sup>13</sup> Although experience data on hours of work is theoretically recoverable from the member companies, as a practical matter it usually is not economically feasible to collect and collate the data for the purpose of actuarial prediction.



ceiving benefits are the possibilities of death or disability before retirement, withdrawal by employees from service without vested rights, and failure to complete a sufficient number of credited hours within the framework of the particular plan's eligibility requirements to maintain credited service.<sup>14</sup> While the mortality and disability elements are fairly predictable underlying factors which an experienced actuary can judge with reasonable accuracy for a given group, the likelihood of the failure of an individual to meet hourly work requirements under multi-employer plan provisions depends upon such factors as the economic climate, the transferability of the employee's work skills, the employee's marital status and financial responsibilities, and, possibly, other factors as well. In addition, the hourly work requirements under the pension plan themselves change from time to time so that the past experience under a prior set of economic conditions and plan provisions may have little predictive value as to the experience that is to be expected under future economic conditions and plan provisions.

Despite the inherent unpredictability of some of the factors mentioned above, they are often used, because an annual determination of pension costs has to be made, and there is nothing better available. The errors that may result, however, are not irretrievable since a new determination is made annually, and a corrective process is thus continually at work.<sup>15</sup> It would be seriously misleading, however, to make disclosures of the kind suggested by the court below without including qualifications of such stringency as to strip the disclosure of any genuine value.

<sup>14</sup> See MCGILL *supra* note 4, at 312-14; ERISA § 202.

<sup>15</sup> This concept is recognized in ERISA in the sections which provide for the amortization of actuarial gains and losses over time. See ERISA §§ 302(b)(2)(B)(iv), 302(b)(3)(B)(ii).

**B. Even If Wholly Accurate Data Were Available Concerning the Anticipated Experience of Plan Participants as a Group, that Data Would Not Justify Quantitative Predictions to Individual Employees**

In the preceding part we sought to explain that the data utilized by actuaries, while quite satisfactory for the intended purposes of computing the actuarial obligations of a pension plan and determining plan costs, does not serve as a basis for making reliable predictions for the purpose of informing employees about the probabilities of their receipt of plan benefits. Actuaries are equally concerned about the misuse of data relating to the anticipated behavior of large groups—even if it is accurate to within very narrow limits—as a basis for conclusions concerning individual members of the group.

In all statistical work the tendency of data to converge to fairly definite limits, as the number of observations increases, serves as the theoretical basis for using statistical experience from the past as a predictor for the future. The law of large numbers, a fundamental principle upon which much of the work of the actuary rests,<sup>16</sup> can be paraphrased for the purposes of this case as follows: "If a sufficient number of observations is made of decisions to withdraw from an industry or company, retirements from service, or deaths before reaching benefit status, and if there is a pattern to these events with regard to the members of a group, then the actual experience results will approximate that pattern." There are two separate assumptions in this statement: (1) there exists for the given group some true underlying pattern of, say, early retirement or withdrawal from service which can be discovered; and (2) sufficient numbers of observations can be taken to permit the statistical results to approximate the underlying pattern as closely as desired.

<sup>16</sup> WALLIS & ROBERTS, *THE NATURE OF STATISTICS* 148-49 (1962).

The first assumption may not hold in the case of pension plans such as the Local 705 pension plan involved in this action. With an ever-changing group of employees and participating companies and an economic climate shifting from transportation by railroad and water to truck and air, it is far from clear that one can expect a stable underlying pattern of employee decision-making that would persist into either the near or the distant future. The second requirement, that sufficient observations must be made in order to discern any underlying pattern that does exist, might well be met for a plan with as many participants as there are in the Teamster plan. But the end result, while highly useful for some purposes, becomes meaningless if the attempt is made to apply them to a particular employee.

To illustrate the theoretical difficulty, two examples may be helpful. Consider the group of all families in the United States population, of which 28 percent have either two or three children.<sup>17</sup> This figure does have relevance for the United States as a whole, and even for major sections of the United States, and can usefully be employed for a number of important purposes. However, it is manifestly not the sort of data on which a newly married couple should rely, say, in examining their insurance needs, because a detailed exploration of their individual situation and plans is feasible. By the same token, it could not be accurate to say of a particular couple that there is a 28 percent chance that they will have either two or three children, simply because the individual factors that will affect the outcome in any given case, both volitional and otherwise, make a statement that is correct when said of the group incorrect when said of an individual. It would assuredly not be helpful to inform a

<sup>17</sup> U.S. DEPT. OF COMMERCE, BUREAU OF THE CENSUS, STATISTICAL ABSTRACT OF THE UNITED STATES 1977, Table No. 60, at 43 (1976 data).

couple that already has five children that they have a 28 percent likelihood of having two or three. And while it may not be quite as self-evident it would also be incorrect to advise a newly married couple that the probability that they will have two or three children is 28 percent, since they may already have made a firm decision to have either none or five.<sup>18</sup>

To take a second example, the collection of extensive data about the height and weight of individuals may permit the making of accurate statements about the group or even about unidentified individuals. Thus, on the basis of extensive observation, it may be possible to establish with complete accuracy the probability that a 20-year-old selected at random will weigh more than 165 pounds. The statistic, however, would convey no useful information about his or her own weight to any particular 20-year-old.

Similarly, a mortality table has only the most limited predictive value for a particular person because the very validity of the table is based upon a large number of lives. For example, the statement may be loosely made that the "life expectancy" of a 65-year-old male is about 14 years. That statement is a shorthand substitute for the more precise statement that it is highly probable that for a very large number of 65-year-old males that have not been selected in some special way (*e.g.*, a sample not confined to college graduates earning over \$50,000 per year) the mean age of death will be 79.<sup>19</sup> A much better prediction can be made for any particular individual by

<sup>18</sup> *Id.* The census data shows that 28 percent of all families have either two or three children. The probability that a newly married couple will have either two or three children is higher since many couples without children when the data was collected will subsequently have children.

<sup>19</sup> *Id.*, Table 95, at 65 (showing 13.7 years for all males age 65) (1975 data).



considering his or her current state of health, economic status, access to health care for the past 20 years, the longevity of parents and grandparents, and a host of other factors. There may be occasions when life expectancy alone will be used in relation to a particular individual as, for example, when a lifetime annuity must be valued for tax purposes,<sup>20</sup> but this is done only because a policy decision has been made that the tax laws be enforced with minimum administrative cost, thereby permitting a valuation based on only one factor.<sup>21</sup>

Where an option is available, it is the better part of wisdom to resist the urge to put in numerical terms what is more accurately expressed in narrative. Particularly where a major cause of termination of employment without the right to pension benefits is employee withdrawal, only a narrative explanation can provide the balanced and accurate presentation that should be available. In short, we believe that it would be most unfortunate for the Congress or this Court to require actuaries to develop and present to individual employees quantitative information which their professional training teaches them will be incorrect, misunderstood, and of little or no value in assessing the likely future course of their working careers or the decisions they must make in connection with their employment.

## II. THE "SALE" OF PENSION PLAN INTERESTS TO COVERED EMPLOYEES

The issue of whether interests in pension plans—if they are held to be securities—are acquired by employees as the result of a "sale" will be extensively briefed by the

<sup>20</sup> Treas. Reg. § 1.72-9, 26 C.F.R. § 1.72-9 (1977).

<sup>21</sup> This Court's decision in *Manhart*, *supra* note 3, was based in part upon the conclusion that the fact that women as a class live longer than men does not warrant drawing a distinction that imposes a heavier burden upon an individual woman than upon a similarly situated man.

parties. We limit ourselves, accordingly, to a discussion of a possibly relevant subordinate issue that may not engage the full attention of others. We suggest that if the interests are "sold" then the amount of the selling price should be ascertainable. Conversely, if the amount of the sales price is necessarily uncertain, this may conceivably affect the determination of the ultimate issue of whether there is a "sale" at all.

### A. Defined Benefit Plans

We consider first the type of plan most commonly adopted by employers in the United States, a defined benefit plan covering the employees of a single employer or of a small number of affiliated employers.<sup>22</sup> An oversimplified example serves to illuminate the nature of the problems. Let us suppose that an employer with 1,000 employees establishes a pension plan that will provide benefits of \$300 per month to each employee who retires at age 65. Of the 1,000 employees, 500 are age 20, 400 are age 40, and 100 are age 60. Further, let us assume that the actuary for this program decides to determine its cost by using only mortality and interest factors with no discount whatever for possible withdrawal from service, a highly conservative but by no means unheard of approach. At 6% interest the individual level costs would be approximately \$121 per year for the employees age 20, \$489 for those age 40, and \$5,316 per year for the employees age 60. The total cost per year would thus be \$787,700.<sup>23</sup> In practice the actuary advises the employer

<sup>22</sup> Appendix A to the brief of the Academy in *Manhart*, *supra* note 3, sets forth a thumbnail sketch of the principal types and features of the retirement plans adopted in this country.

<sup>23</sup> These individual level costs were computed by standard actuarial techniques using the UP-1984 Mortality Table and six percent interest. See Fellers & Jackson, *Non-Insured Pensioner Mortality, The UP-1984 Table*, 25 PROCEEDINGS, CONFERENCE OF ACTUARIES IN PUBLIC PRACTICE 456 (1976) (this table is for combined populations of men and women, that is, it is a "unisex" table).

only that a contribution of \$787,700 is appropriate. No allocation is made, on the plan books or otherwise, of portions of this contribution to individuals or groups of employees. These amounts reflect the fact that the mortality table would show that the probability of the 20-year-old employees surviving until 65 is 79%, that the probability is 81% for the 40-year-olds and 92% for those of 60.<sup>24</sup>

Suppose, on the other hand, that the actuary had decided to take into account the possibility of withdrawal from the group under a fairly high scale of withdrawal rates, commencing with an annual rate of 30% at age 20, 20% at age 25, 10% at 35, 4% at 45, and mortality only for those older than 55. Under this set of assumptions the annual cost would drop from \$121 to \$10 for those age 20 and from \$489 to \$420 for those age 40. The total cost would drop from \$787,700 per year to \$704,600. However, under this new set of assumptions the employees age 20 are regarded as having—for the purpose of determining the annual contribution—only a 2% chance of reaching age 65 in service (rather than 79%), the employees age 40 a 53% chance (rather than 81%), and the employees age 60 a 92% chance (unchanged).

It is noteworthy that the extreme variation in the probability of reaching retirement age between the two sets of assumptions results in a fairly minor variation in aggregate pension cost.<sup>25</sup> Moreover, if the actuary chose to assume no withdrawal but assumed a 7% rate of interest rather than 6%, the program cost would drop from

<sup>24</sup> Based on UP-1984 Table, *supra* note 23.

<sup>25</sup> These data serve to reinforce the point made in Part I(A), *supra* page 7, to the effect that different assumptions may each be perfectly acceptable for the purpose of determining contribution rates but cannot safely be used if estimates are to be made of the chances that benefits will be paid to a particular individual.

\$787,700 per year to \$680,300 per year.<sup>26</sup> Furthermore, if retirement were assumed to be optional at age 65 but in fact experience showed that most employees retired at age 67 rather than age 65, the \$787,700 yearly cost could prudently be reduced sharply to \$527,400.<sup>27</sup> The probability of surviving in service to receive a pension would, however, remain unchanged since employees reaching age 65 have the right to retire but would simply not be expected to do so until 67 on average.

What would be the purchase price of the "securities" acquired by each employee? It does not seem appropriate simply to divide \$787,700 or \$704,600 or \$680,030 or \$527,400 by 1,000 (if a sensible choice among the four can be made), since evidently a much higher portion of the unallocated annual contribution will be used to provide the benefits for the older employees. And even if age and withdrawal rates based on age are considered adequate for the purpose of determining the annual contribution, a second question is whether other factors such as sex, length of service, and nature of employment should be taken into account if it becomes necessary to determine how much each individual employee has "paid" for his or her interest in the plan. It should also be noted that this computation would have to be made annually, and that some of the factors that are regarded as significant will probably change from year to year.

We do not suggest that an essential element of every "sale" must be the existence of an ascertainable and precise sales price. The securities laws do, however, contemplate that under certain circumstances a party to a sale may have the right to rescind it. In such case there is a right to get back what is given. Moreover, as a

<sup>26</sup> Application of standard actuarial techniques using the UP-1984 Table and seven percent interest. See note 23 *supra*.

<sup>27</sup> See note 23 *supra*.



matter of general contract law, when determining whether a "sale" has taken place, a court may sometimes countenance a missing or imprecise price provision, but will find that there is no contract and therefore no sale if there is no reasonable basis upon which the parties may establish the price to be paid or received.<sup>28</sup> In one of the examples given above, where the employer contributed \$5,316 for a 60-year-old employee and \$10 for a 20-year-old employee, are these the amounts regarded as having been "paid" by those employees into the fund held for the payment of benefits, or would it be more correct to use one of the other amounts that can as readily be chosen? It may be—accepting the conclusion that pension benefits are a significant part of the employees' "compensation"—that a better

<sup>28</sup> See 1 A. CORBIN, CONTRACTS § 97 (1963), 1 S. WILLISTON, CONTRACTS § 41 (1957), and 1 S. WILLISTON, SALES §§ 9-1 and 9-2 (4th ed. A. Squillante & J. Fonseca 1973). A contract of sale may be found to have been made where the price can be reasonably determined. See, e.g., *Henderson Bridge Co. v. McGrath*, 134 U.S. 260, 269-70, 275-76 (1890) (jury could ascertain the reasonable worth of construction of railroad piling, where proof on the worth was offered and other piling had been built and paid for), and *United States v. Swift & Co.*, 270 U.S. 124, 139-41 (1926) (price of monthly shipments of bacon could be left for determination according to costs incurred during the month). But where there is no reasonable basis for constructing a price term, there is no contract. See, e.g., *Red Wing Shoe Co. v. Shepherd Safety Shoe Corp.*, 164 F.2d 415, 416, 418 (7th Cir. 1947), where an agreement for an exclusive agency in shoes was held to be unenforceable, because the provision establishing the price by reference to manufacturing cost did not "explain how the costs and profits were to be broken down to establish the actual gross price from which the net to Shepherd was to be fixed for each item ordered by it." See also U.C.C. §§ 2-204(3), 2-305 and accompanying commentary.

In addition, with respect specifically to investment securities, U.C.C. § 8-301 accords rights to a "purchaser" upon "delivery," which requires the "transfer of possession" of the security. U.C.C. § 1-201(14), (32). A pension plan participation hardly fits naturally into this framework. It could be responded that the "security" acquired through participation in a pension plan is an "investment contract" but that it is not an "investment security," but this further illustrates the artificiality of applying these concepts in his area.

answer is that the Congress did not have transactions of this kind in mind when it used the term "sale" in the federal securities laws.

### B. Multi-Employer Plans

The determination of the annual contributions that must be made by each employer that participates in a multi-employer plan proceeds somewhat differently. It is customary in the negotiation of pension benefits, and of other employee benefit plans as well, for the parties in collective bargaining to make a part of the discussions possible improvements in benefits together with the total cost required to support those improvements. In some cases the total cost of the improvements ultimately agreed upon is developed for the entire group and converted, for convenience in bargaining and in determining required contributions to the plan, into a cents-per-person-hour cost. Alternatively, the parties may bargain for an increase in wages and then decide how much should be in the form of increased wages and how much contributed for funding retirement benefits. The actuary will then determine what improvements can be made in the plan benefits.

Thus, for example, in the case of the illustrated pension plan covering 1,000 employees with a cost of \$787,700 per year, the cents-per-person-hour based on a 40-hour work week and 52-week year would be 37.9. This is not to say, however, that each individual employee would have an expectation of a benefit that results from a contribution in that amount or that each of them would have received that amount in wages had the parties agreed not to have any retirement plan. Indeed, the individual factors used by the actuary in developing the cents-per-hour-cost might have produced an estimate of the cost for the employees at age 20 that was only about 2% of the cost for the employees at age 60 and a cost for the employees

at age 40 that was only about 9% of the age 60 cost.<sup>29</sup> Despite these discrepancies, total pension costs can clearly be determined for the group as a whole, and in the bargaining the various parties can agree to devote a certain number of cents-per-hour worked to the support of the entire pension program. The point is that such an amount cannot fairly be said to be related in any way to the benefit that any one particular employee will ultimately receive.<sup>30</sup>

Moreover, while the device of converting a total pension cost into cents-per-hour has the advantage of increasing employer contribution requirements as new employees are added to the group and decreasing them as employees leave, it is by no means the only device that can be adopted. The well known mine workers plan provides for payment of a stated royalty per ton of coal, for example, which by reason of automation in the industry is worth far more than a cents-per-hour contribution would have been. Since several operations are required to mine a ton of coal it is difficult if not impossible to say how many cents per hour are being paid for any particular employee. Other plans exist where contributions are not stated in cents-per-hour. For example, there is a master barber pension program with employer contributions expressed in terms of so many dollars per week per barber chair in the establishment. Thus the identical problem is presented under multi-employer plans as is presented under single employer defined benefits plans: Is it possible to say within any reasonable limits how much has been paid by each employee in return for the acquisition of an

<sup>29</sup> See page 15 *supra*.

<sup>30</sup> Nor are the benefits involved necessarily narrowly defined. Some younger employees may gain indirectly from higher pension contribution resulting from the presence of older persons in the work force, since retirements open up job opportunities, so that the availability and attractiveness of retirement to older workers can increase both the opportunity for advancement and job security for younger workers.

interest in the pension plan? As suggested above, it is possible to characterize what happens when a pension plan is established or modified as the occurrence of a number of transactions in which the promised benefits are "purchased" by each employee in return for a portion of his labor; then an arbitrary selection can be made of one of several acceptable amounts that each particular employee can be said to have paid for each year's interest in the plan. A far less tortured description, however, and one that we regard as more accurate, would be to say that part of each employee's compensation takes the form of a retirement benefit that will be payable if certain conditions are satisfied, in an amount computed in accordance with a stated formula, and that the cost of those benefits will be borne by the employer or employers without any allocation of that cost among the individual employees.

## CONCLUSION

For a number of reasons, then, the belief of the courts below that a new employee could be readily furnished with a statement of the "actuarial probability" that the employee would actually receive retirement benefits is seriously in error. When making the necessary determination of the amounts that should be contributed toward the provision of pension benefits, actuaries do frequently consider the likelihood that eligible employees will not actually receive benefits. But their estimates, while wholly satisfactory for the purpose for which they are made, are not adequate for making the kind of predictions that the courts below thought possible. The data is sufficiently accurate for cost determination purposes, particularly since an annual corrective process is at work, but insufficient for the purpose of informing employees about their own prospects. Some relevant factors may safely be ignored for the first purpose—and commonly are—but not for the second. Also, it is commonplace to make conserva-



tive estimates when making cost determinations, but that may not be satisfactory if advice to employees is being given. Finally, and perhaps most importantly, actuarial data that is sound when applied to large groups cannot be relied upon by particular individuals who want to know something of their own futures.

We are in complete agreement with the view that full disclosure to participants about the salient features of their plans, and particularly about the factors that may affect the ultimate receipt of benefits, is both highly desirable and feasible. What we assert is that to provide quantitative estimates of the probability of receiving benefits would involve effort and expense altogether incommensurate with the value of the inherently unreliable conclusions that could be drawn. In the final analysis, each individual, given the kind of information provided by the summary plan description required by Sections 102 (a) (1) and 104(b) (1) of ERISA and by 29 CFR § 2520.102-3(j) (1) and (n), can best evaluate for himself or herself the likelihood of receiving benefits.

This Court should render its decision free from the misapprehensions of the courts below as to the availability and usefulness of the actuarial data that they believed would be provided to participants through the application of the federal securities laws.

Respectfully submitted,

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